

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) An isolated polypeptide comprising a sequence selected from one of:

(a) SEQ ID NOS:1-23; or

(b) SEQ ID NOS:26-31.

2. (Canceled).

3. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:1 or SEQ ID NO:9.

4. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:2 or SEQ ID NO:10.

5. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:3 or SEQ ID NO:7.

6. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:8.

7. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:4 or SEQ ID NO:13.

8. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:5 or SEQ ID NO:17.

9. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:6 or SEQ ID NO:18.

10. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:12 or SEQ ID NO:21.
11. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:11 or SEQ ID NO:15.
12. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:14 or SEQ ID NO:16.
13. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:19 or SEQ ID NO:20.
14. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:22 or SEQ ID NO:23.
15. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:26 or SEQ ID NO:27.
16. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:28 or SEQ ID NO:29.
17. (Original) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:30 or SEQ ID NO:31.
18. (Previously Presented) The isolated polypeptide of claim 1 wherein the polypeptide comprises part of a carrier protein.
19. (Previously Presented) The isolated polypeptide of claim 1 further comprising an accessory molecule.
20. (Previously Presented) The isolated polypeptide of claim 19 wherein the accessory molecule is a tag molecule, chemotherapeutic agent, radiopharmaceutical, cytotoxic agent, treatment molecule, antigenic molecule, antibody fragment or antibody.

21. (Previously Presented) The isolated polypeptide of claim 1 wherein the polypeptide consists essentially of a sequence selected from (a) or (b).

22 - 32. (Canceled).

33. (Previously Presented) A kit comprising one or more polypeptides comprising a sequence selected from one of:

(a) SEQ ID NOS:1-23; or

(b) SEQ ID NOS:26-31.

34 - 54. (Canceled).

55. (Previously Presented) An isolated polypeptide comprising a sequence selected from one of: SEQ ID NOS: 1-23 having one conservative amino acid substitution, wherein the polypeptide binds to acute myeloid leukemia cells.

56. (Previously Presented) The isolated polypeptide of claim 55 wherein the conservative amino acid substitution substitutes one hydrophobic residue for another hydrophobic residue.

57. (Previously Presented) The isolated polypeptide of claim 56 wherein the hydrophobic residues are independently selected from the group consisting of isoleucine, valine, leucine and methionine.

58. (Previously Presented) The isolated polypeptide of claim 56 wherein the hydrophobic residues are independently selected from the group consisting of phenylalanine or tryptophan.

59. (Previously Presented) The isolated polypeptide of claim 55 wherein the conservative amino acid substitution substitutes one polar residue for another.

60. (Previously Presented) The isolated polypeptide of claim 59 wherein the polar residues are independently selected from the group consisting of arginine and lysine.

61. (Previously Presented) The isolated polypeptide of claim 59 wherein the polar residues are independently selected from the group consisting of glutamic and aspartic acids.

62. (Previously Presented) The isolated polypeptide of claim 59 wherein the polar residues are independently selected from the group consisting of glutamine and asparagine.

63-72. (Canceled)

73. (Previously Presented) The isolated polypeptide of claim 55 wherein the sequence is selected from SEQ ID NO:1 or SEQ ID NO:9 having one conservative amino acid substitution.

74. (Previously Presented) The isolated polypeptide of claim 55 wherein the sequence is selected from SEQ ID NO:2 or SEQ ID NO:10 having one conservative amino acid substitution.

75. (Previously Presented) The isolated polypeptide of claim 55 wherein the sequence is selected from SEQ ID NO:3 or SEQ ID NO:7 having one conservative amino acid substitution.

76. (Previously Presented) The isolated polypeptide of claim 55 wherein the sequence is selected from SEQ ID NO:8 having one conservative amino acid substitution.

77. (Previously Presented) The isolated polypeptide of claim 55 wherein the sequence is selected from SEQ ID NO:4 or SEQ ID NO:13 having one conservative amino acid substitution.

78. (Previously Presented) The isolated polypeptide of claim 55 wherein the sequence is selected from SEQ ID NO:5 or SEQ ID NO:17 having one conservative amino acid substitution.

79. (Previously Presented) The isolated polypeptide of claim 55 wherein the sequence is selected from SEQ ID NO:6 or SEQ ID NO:18 having one conservative amino acid substitution.

80. (Previously Presented) The isolated polypeptide of claim 1 wherein the sequence is selected from SEQ ID NO:12 or SEQ ID NO:21 having one conservative amino acid substitution.

81. (Previously Presented) The isolated polypeptide of claim 55 wherein the sequence is selected from SEQ ID NO:11 or SEQ ID NO:15 having one conservative amino acid substitution.

82. (Previously Presented) The isolated polypeptide of claim 55 wherein the sequence is selected from SEQ ID NO:14 or SEQ ID NO:16 having one conservative amino acid substitution.

83. (Currently Amended) The isolated polypeptide of claim 55 wherein the sequence is selected from SEQ ID NO:19 or SEQ ID NO:20 having one conservative amino acid substitution.

84. (Canceled)

85. (Currently Amended) The isolated polypeptide of claim 55 wherein the sequence is selected from SEQ ID NO: 22 or SEQ ID NO:23 having one conservative amino acid substitution.

86. (Currently Amended) The isolated polypeptide of claim 55 wherein the polypeptide induces differentiation of acute myeloid leukemia cells into mature blood cells that perform normal blood cell function, and further wherein the polypeptide has a sequence selected from SEQ ID NOS: 1, 2, 3, 7, 8, 9, 13, 15, 16, 21 or 22 having one conservative amino acid substitution.

87. (Currently Amended) The isolated polypeptide of claim 86 wherein the polypeptide has a sequence selected from SEQ ID NOS: 1 or 3 having one conservative amino acid substitution.

88. (Currently Amended) An isolated polypeptide comprising a sequence selected from one of SEQ ID NOS: 26-2331 having one conservative amino acid substitution, wherein the polypeptide binds to normal bone marrow cells, but not to acute myeloid leukemia cells.

89. (Currently Amended) The isolated polypeptide of claim 88 wherein the sequence is selected from SEQ ID NO: 28 or SEQ ID NO: 29 having one conservative amino acid substitution.

90. (Currently Amended) The isolated polypeptide of claim 88 wherein the sequence is selected from SEQ ID NO: 30 or SEQ ID NO: 31 having one conservative amino acid substitution.